



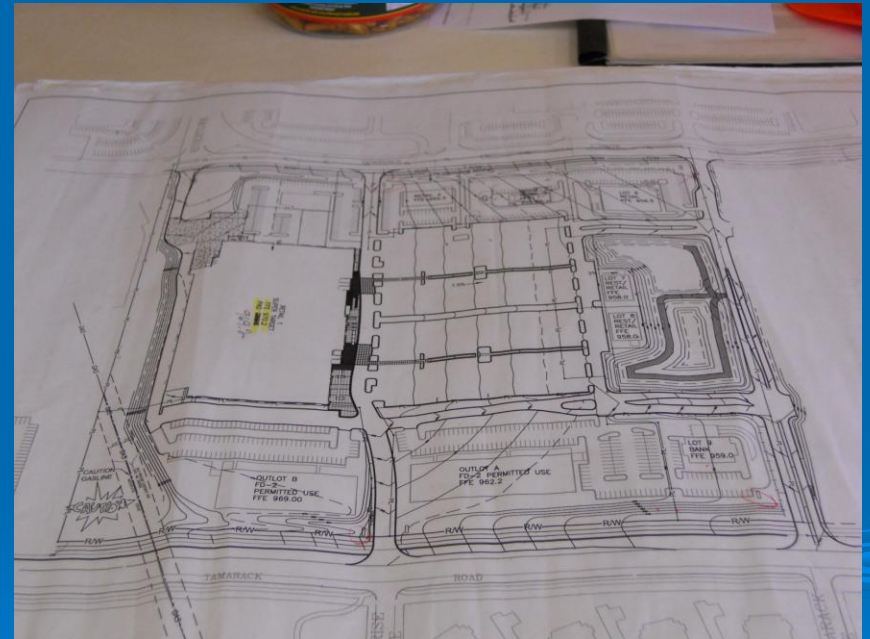
North Dakota Commercial

# Project sites large and small with lots of activity





# Plan must contain drainage patterns and drainage features in the area



**We must handle drainage and potential brown water discharge to water resources in the area.....man made, impaired or.....**





# Site access... rock entrances



# Bituminous and rock entrance





# Long entrance/pave by building



# Mud Mats





# Mud mats have limitations



# Tire Wash





# Perimeter Control



# May need wire backing for wind





# Designate buffers and berm the site.



# Berm the site

## Curb can be a berm













# Ecosnake

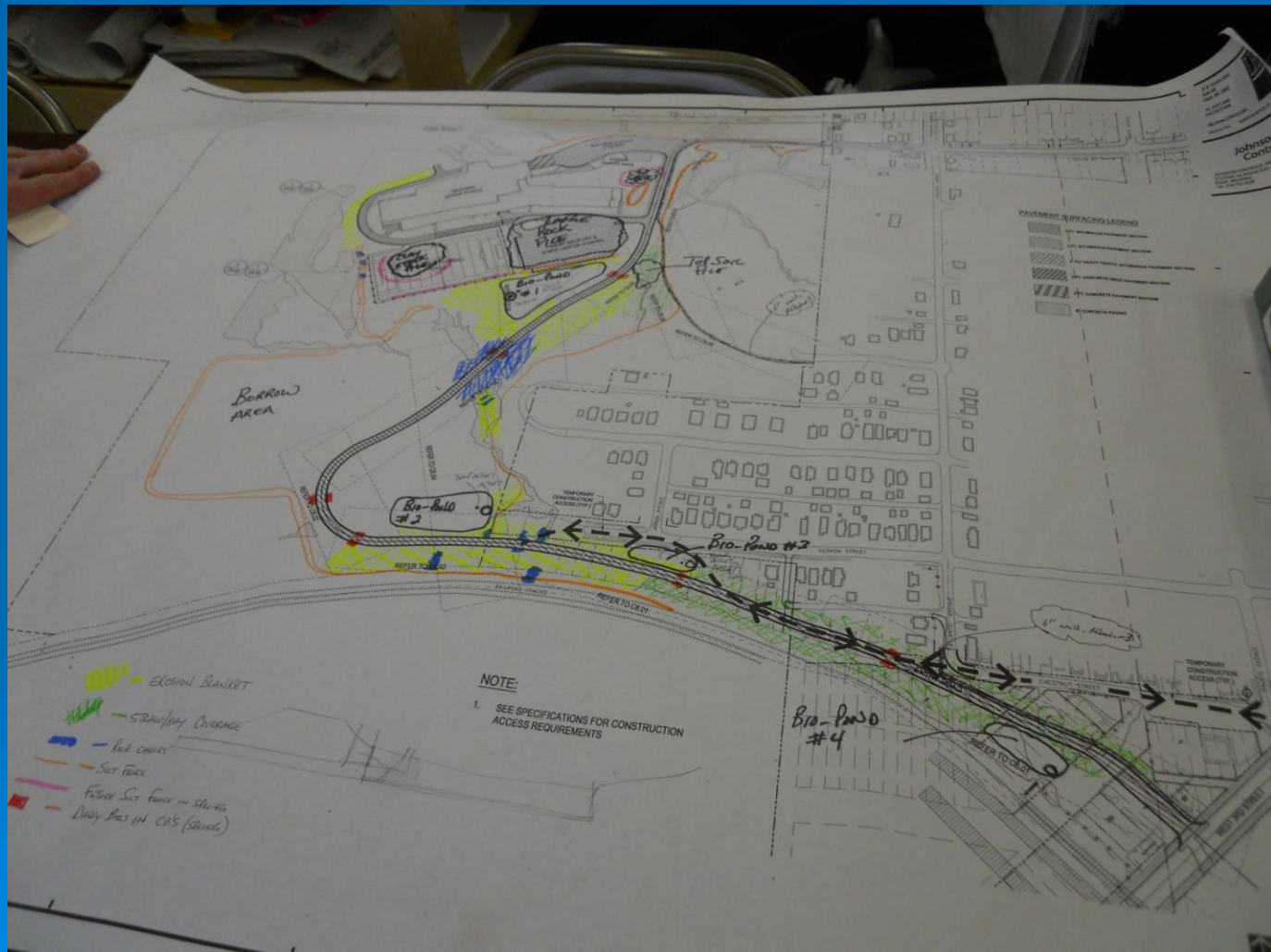


# Compost logs





# We need a plan for the drainage and protection measures.



# Inlet protection





Take inlets off line/use robust measures on the critical inlets internal to project



# Combination of temporary and permanent ponds.





# Tilt grading



We have drainage contained.....  
Now what?





# Next generation of dewatering dumpsters



Stabilize portions of the site while working in another part of the site





# Temporary cover is always “under-utilized” .....



# Stockpile protection





# Bonded Fiber Matrix

- Super duty hydro mulch
- Permanent application
- Can't drive on
- Needs time to cure
- Don't apply over snow



# Site stabilization for winter





# Provide measures for winter



# Housekeeping





# Storage/waste handling



# Fuel storage -Fueling





# Concrete slurry management



# Concrete management by others





# Spec mixer sites



# BMP maintenance





# Dust control



# Entrance maintenance and street sweeping





# Infiltration parking areas

## Pavers and net lawn system



# Permanent ponds....





# Rain water treatment for parking lots

## ➤ Net lawn and sod



## ➤ Rain gardens





# Bio-swale landscaping

